CLAIMS:

1. A method of encoding an audio signal (x), wherein a code signal (b1) is generated from the audio signal (x) according to a predefined coding method (201), and wherein the method further comprises the steps of:

- transforming (207) the audio signal (x) into a set of transformation parameters (b2) defining at least a part of the spectro-temporal information in said audio signal (x), said transformation parameters (b2) enabling generation of a noise signal having spectro-temporal characteristics substantially similar to said audio signal, and

- representing said audio signal (x) by said code signal (b1) and said transformation parameters (b2).

2. A method according to claim 1, wherein the transformation parameters (b2) include at least one prediction coefficient ($\alpha 1,\ldots\ldots\alpha K$) and/or energy level and/or amplitude level and/or gain and/or power level of the audio signal (x).

3. A method according to claim 1 or 2, wherein the transformation parameters (b2) comprise psycho-acoustic data such as a masking curve and/or an excitation pattern and/or a loudness of the audio signal (x).

4. A method according to any one of claims 1-3, wherein the code signal (b1) comprises amplitude and frequency parameters defining at least one sinusoidal component of said audio signal (x).

5. A method according to any one of claims 1-4, wherein the transformation parameters (b2) are representative of an estimate of an amplitude of sinusoidal components of said audio signal (x).

6. A method of decoding an audio signal from transformation parameters (b2) and a code signal (b1) generated according to a predefined coding method (201), the method comprising the steps of:

- decoding said code signal (b1) into a first audio signal (x1') using a decoding method (203) corresponding to said predefined coding method (201),

- generating from said transformation parameters (b2) a noise signal (r2') having spectro-temporal characteristics substantially similar to said audio signal

- generating a second audio signal (x2') by removing from the noise signal (r2') spectro-temporal parts of the audio signal that are already contained in the first audio signal (x1'), and

- generating the audio signal (x') by adding (211) the first audio signal (x1') and the second audio signal (x2').

7. A method according to claim 6, wherein said step of generating the second audio signal (x2') comprises:

- deriving a frequency response by comparing a spectrum of the first audio signal (x1') with a spectrum of the noise signal (r2'), and

- filtering the noise signal (r2') in accordance with said frequency response.

8. A method according to claim 6, wherein said step of generating the second audio signal (x2') comprises:

- generating a first residual signal (r1) by spectrally flattening the first audio signal (x1') in dependence on spectral data in the transformation parameters (b2),

- generating a second residual signal (r2) by temporally shaping a noise sequence in dependence on temporal data in the transformation parameters (b2),

- deriving a frequency response by comparing a spectrum of the first residual signal (r1) with a spectrum of the second residual signal (r2), and

- filtering the noise signal (r2') in accordance with said frequency response.

9. A method according to claim 6, wherein said step of generating the second audio signal (x2') comprises:

- generating a first residual signal (r1) by spectrally flattening the first audio signal (x1') in dependence on spectral data in the transformation parameters (b2),

- generating a second residual signal (r2) by temporally shaping a noise sequence in dependence on temporal data in the transformation parameters (b2),

- adding the first residual signal (r1) and the second residual signal (r2) into a sum signal (sk),

- deriving a frequency response for spectrally flattening the sum signal (sk),

- updating the second residual signal (r2) by filtering the second residual signal (r2) in accordance with said frequency response,

- repeating said steps of adding, deriving and updating until a spectrum of the sum signal (sk) is substantially flat, and

- filtering the noise signal (r2') in accordance with all of the derived frequency responses.

10. A device (102) for encoding an audio signal (x), the device comprising a first encoder (701) for generating a code signal (b1) according to a predefined coding method, wherein the device further comprises:

- a second encoder (703) for transforming the audio signal (x) into a set of transformation parameters (b2) defining at least a part of the spectro-temporal information in said audio signal (x), said transformation parameters (b2) enabling generation of a noise signal having spectro-temporal characteristics substantially similar to said audio signal (x), and

- processing means (705) for representing said audio signal (x) by said code signal (b1) and said transformation parameters (b2).

11. A device (107) for decoding an audio signal from transformation parameters (b2) and a code signal (b1) generated according to a predefined coding method (201), the device comprising:

- a first decoder (203) for decoding said code signal (b1) into a first audio signal (x1') using a decoding method corresponding to said predefined coding method (201),

- a second decoder (209) for generating from said transformation parameters (b2) a noise signal (r2') having spectro-temporal characteristics substantially similar to said audio signal,

- first processing means (305,307) for generating a second audio signal (x2') by removing from the noise signal (r2') spectro-temporal parts of the audio signal that are already contained in the first audio signal (x1'), and

- adding means (211) for generating the audio signal (x') by adding the first audio signal (x1') and the second audio signal (x2').

12. An encoded audio signal (b) comprising a code signal (b1) and a set of transformation parameters (b2), wherein said code signal (b1) is generated from an audio signal (x) according to a predefined coding method (201) and wherein the transformation parameters (b2) define at least a part of the spectro-temporal information in said audio signal (x), wherein said transformation parameters (b2) enable generation of a noise signal having spectro-temporal characteristics substantially similar to said audio signal.

13. A computer-readable medium comprising a data record indicative of an encoded audio signal according to claim 11.